



STATE OF MONTANA
DEPARTMENT OF ADMINISTRATION
INFORMATION TECHNOLOGY SERVICES DIVISION



Brian Schweitzer
Governor

State of Montana

Agency Biennial Report

FY2010 UPDATE FOR THE 2008 PLAN



***Montana Fish,
Wildlife & Parks***

STATE OF MONTANA

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INFORMATION TECHNOLOGY SERVICES DIVISION

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EXECUTIVE SUMMARY

In 2009, Montana Fish, Wildlife and Parks (FWP) underwent a fairly substantial reorganization. A certain amount of time and energy was occupied with the changes to existing systems associated with supervisory structures, organizational reports, personnel directories, email lists, etc, or processes associated with requesting or prioritization of technology services. The majority of Technology Services (formerly called Information Services) was left intact although the GIS function was moved to the Fish & Wildlife Division. The Technology Services Bureau (TSB) continues to have employees headquartered in Helena, with support technicians located in all seven of the regional offices across the state.

During the 2008 – 2010 biennium, TSB has been able to complete numerous tasks or projects that lend themselves to stated objectives. However, few of the objectives were fully “completed”, and instead fall more into a category of continuing to be “ongoing”. It’s clear that the 2008 strategic IT plan could have been crafted a little differently, with less general objectives and instead more specific, tangible and measurable objectives. TSB attempted to take that into consideration as the newer 2010 FWP strategic IT plan was developed.

With that said, the majority of the efforts by TSB over the 2008 – 2010 biennium were geared toward development of consistent standards and processes related to technology to utilize going forward, and notable products and services that will, over time, result in savings and expanded services to the public. Those items include:

- Focus on system delivery and training of users to ensure more effective use of computer applications, and technology staff training to ensure skills remain current within the industry.
- Cooperative efforts with other state agencies, as well as Fish & Wildlife entities across the nation.
- A new open source content management system for FWP’s Web site (OpenCMS)
- A video conferencing system at all major FWP offices across the state.
- Audio capture and management capabilities to allow live streaming of Commission meetings, as well as the ability to find and review historical discussions.
- Virtualization of numerous servers within FWP’s computing infrastructure for savings in both replacement and energy costs.
- Initiation of a project to develop a comprehensive statewide Fish & Wildlife system and database.
- Growth and expansion of services related to electronic licensing.
- Software version migrations or upgrades, and movement toward one standard computing platform.
- Timely application of all security patches, etc, and initiation of an agency security program.
- Recruitment and retention of quality technology staff.

Within the 2008 strategic plan, TSB identified eight (8) Initiatives. Four (4) of those initiatives were either entirely completed or had substantial progress made, with only ancillary efforts remaining. The other four (4) had progress made, but continue to have a fair amount of effort remaining before one could truly consider them “completed”. In most cases, these initiatives had as much completed as was possible during this reporting period. Most require additional funding, another entities attention, or a “cycle” (Eg. replacement cycles for computers) to be completed before the entire initiative can be considered done. These projects are ongoing and receiving attention regularly.

One primary intent of the 2008 strategic plan was to continue to establish the framework to allow a centralized approach to technology to guide FWP into the future, and it’s felt that as of this point in time, FWP has seen a good deal of movement in that direction.

SECTION 1: AGENCY IT PLAN ACCOMPLISHMENTS – GOALS & OBJECTIVES

Complete this section by copy and pasting the Goals and Supporting Objective/Actions listed in section 4.1 of your agency’s 2008 plan. After each supporting objective, insert the two additional questions for accomplishments and status. Answer these two questions.

1.1 Goals

Goal Number 1

ITG 1 Communicate, provide technical support, and participate in collaborative efforts

Description: FWP Information Services Division (ISD) staff will communicate with stakeholders to provide effective training, user documentation, service information, and other types of technical support. FWP ISD staff will participate in collaborative efforts with programs, other states, and federal entities in order to achieve cooperative and effective solutions.

Benefits:

- More comprehensive solutions
- Better informed stakeholders
- Effective use of information services
- Clearer understanding of user needs and requirements
- Ability to take advantage of regional and national successes

Which state strategic goal(s) and/or objective(s) does your goal address?

Effective communication and collaborative efforts will contribute to more organized, deliberate and cost effective IT resource development, and ultimately improved government services.

Supporting Objective/Action

ITO 1-1 Provide necessary training and technical support to FWP staff and end users. Train staff and provide reliable/consistent technical support for information technology applications and tools in order to increase work efficiencies.

Accomplishments: 1. FWP has adopted a routine of appointing system “champions” (or Product Owners) from the within the associated business program to any new application and database. This ensures there is a business owner who can assume responsibility for business questions or issues related to the system. In addition, FWP’s Technology program has developed processes for consistent development of user manuals, and provides training of users as a routine step within system delivery. 2. Technology staff are encouraged to seek continual improvement through training, workshops and conferences.

Status: Ongoing as substantial revisions to existing services change, new applications are built, and to align with change within the technology industry.

Supporting Objective/Action

ITO 1-2 Provide and receive input and expertise to state, regional, and national efforts involved in information services, technology and management.

Accomplishments: 1. FWP Technology staff participate regularly and actively in Information Technology Managers Council (ITMC) meetings and workgroups. Communities of interest focus efforts toward like types of business in cross-agency efforts. 2. Cooperative efforts occur regularly and include sharing expertise and appropriate business information with many Montana entities, and Fish & Wildlife agencies across the nation.

Status: Ongoing

Goal Number 2

ITG 2 Provide effective data and information services.

Description: Timely and effective data and information management, application development and support, and technology delivery to customers. Special emphasis is to be placed on “customer service”.

Benefits:

- Increased system efficiency
- Decision support services delivered
- Reduced administrative overhead
- Satisfied customers
- State-of-the-art technologies are available for FWP staff use
- Lower overall technology related costs

Which state strategic goal(s) and/or objective(s) does your goal address?

Effective data and information services, within FWP programs, improve government services and thus contribute to a more favorable business climate. (Eg. Better resource management results in increased participation which in turn results in benefits to the state's economy, and the quality of life for Montana citizens as well)

Supporting Objective/Action

ITO 2-1 Develop the necessary actions, activities, partnerships and funding proposals to coordinate and facilitate the development and maintenance of data related to the management of Montana's fish, wildlife & parks.

Accomplishments: During this reporting period, FWP started a project designed to be a statewide comprehensive Fish & Wildlife system and database. This is a project to standardize, consolidate and centralize biological data. It will modernize a historically regionalized and isolated wealth of data so that Fish & Wildlife decisions are based on current and up-to-date information. Many planning activities and partnerships will be foundational to ensuring this project's success.

Status: Ongoing. This project is anticipated to continue over the next biennium.

Supporting Objective/Action

ITO 2-2 Expand, enhance and provide web-based and other e-services for customers.

Accomplishments: 1. FWP's Web site had a new content management system deployed during this reporting period. The software is an Open Source product which has to date performed very well and been well received by internal users and the public. OpenCMS provides business staff the ability to maintain their own content with little to no interaction with technology staff, and offers FWP flexibility and many options not previously available for site management. 2. FWP's eLicense system continued to evolve to meet the expectations of the public and those making decisions on expanded licensing options (Eg. Super tags).

Status: Ongoing

Supporting Objective/Action

ITO 2-3 Stay abreast of emerging technologies through research and development in order to best serve FWP stakeholders.

Accomplishments: FWP Technology staff are regularly encouraged to watch the technology industry for new products or philosophies which may help FWP remain near the leading edge. For example, at a time when virtualization has recently become a focus, FWP had already previously virtualized 66% of its centralized footprint.

Status: Ongoing

Supporting Objective/Action

ITO 2-4 Provide a cost-effective IT infrastructure that will facilitate the consolidation of

appropriate FWP technology services.

Accomplishments: FWP continually focuses an eye toward internal efficiency: Virtualization of servers; Development of standardized, centralized, service oriented or reusable applications; Standardized and consistent deployment of computers, printers and other peripherals.

Status: Ongoing

Supporting Objective/Action

ITO 2-5 Ensure that FWP staff have adequate delivery infrastructure available to take advantage of agency provided toolsets and services.

Accomplishments: FWP programs have cooperatively worked with technology staff to identify individuals with a business need to enter, manipulate or review data. Access mechanisms are identified and, if necessary, operations funds are re-directed to cover the cost of high-speed access.

Status: Ongoing

Supporting Objective/Action

ITO 2-6 Consolidate GIS infrastructure by centralizing GIS software applications and data delivery through the implementation of GIS server technology.

Accomplishments: During this reporting period, FWP Technology staff began standing up an ArcServer test environment to allow centralization of GIS applications and functions. Implementation of the production environment is anticipated within the current fiscal year.

Status: Ongoing. Once test has been thoroughly exercised, a production environment will be deployed.

Goal Number 3

ITG 3 **Stable, secure and recoverable systems.**

Description: FWP applications and systems remain operational, free from compromise and can be recovered according to operational business requirements.

Benefits:

- FWP business continuity
- Stakeholder confidence
- Sensitive data protected
- Individual privacy safeguarded
- Appropriate and timely information provided to decision makers

Which state strategic goal(s) and/or objective(s) does your goal address?

Stable, secure and recoverable systems are at the very heart of protecting individual privacy and privacy of information. Stability and recoverability leads to improved government services in availability and uptime.

Supporting Objective/Action

ITO 3-1 Provide the data communication infrastructure that allows FWP staff in outlying regions to securely, efficiently and effectively access and manipulate data contained in FWP systems in a supportable manner.

Accomplishments: FWP Technology staff worked closely with appropriate field staff to identify cost effective high-speed data options for applications critical to their business function. As noted in a previous answer, business programs have redirected funding where necessary to cover the cost of the access for those employees they deem appropriate.

Status: Ongoing as additional users are identified or new services are deployed.

Supporting Objective/Action

ITO 3-2 Determine areas where the efficiency and supportability of FWP systems can be improved.

Accomplishments: As existing applications are touched for maintenance or enhancement efforts, technology staff are encouraged to identify any and all opportunities for more efficient products. Reusable code and call-able routines help to minimize redundancy and multiple points of failure.

Status: Ongoing

Supporting Objective/Action

ITO 3-3 Evaluate FWP's current/proposed IT environment from the security and business continuity perspectives. Identify weaknesses in technology, design, and procedures and implement mitigation strategies.

Accomplishments: During this reporting period, FWP hired an individual to function as Security Officer. That individual has standardized many forms and processes necessary for agency provisioning needs. Examination of FWP Security and business continuity considerations have begun, but much work is yet to be done to lead toward a comprehensive agency security program. As weaknesses are identified, mitigation strategies are identified with options for implementation considered.

Status: Ongoing.

Goal Number 4

ITG 4 Workforce recruitment, development, and retention

Description: Skilled IS staffs are more easily recruited, existing staff have opportunities for additional training, progression within existing positions and career growth, and employee turnover is minimized. As

outlined in the Agency's Goal A, the work environment has clear priorities, the decision-making process is efficient and effective; and employees feel a sense of accountability, value and satisfaction in their achievements and their contributions to the agency's mission.

Benefits:

- Employees can perform challenging and meaningful work
- Opportunities for career growth, learning, and development are maximized
- Employees are recognized, valued, and respected for the contributions they make
- Employees are compensated fairly for the work they do
- Lower employee turnover/increased retention
- Critical business areas have cross-trained support

Which state strategic goal(s) and/or objective(s) does your goal address?

This goal directly addresses the state's first goal of creation of quality jobs and a favorable business climate. In addition, through such development of the FWP IS workforce it ultimately improves government service.

Supporting Objective/Action

ITO 4-1 Enhance and improve the flexibility of FWP recruitment processes for IS positions.

Accomplishments: Recruitment efforts were delayed in this reporting period because of increased mandates for vacancy savings. FWP management provided flexibility to technology hiring committees to allow other than entry salaries to be offered, where necessary.

Status: Ongoing

Supporting Objective/Action

ITO 4-2 Develop and maintain a team of FWP IS employees with the knowledge and skills to meet the information services needs of FWP.

Accomplishments: FWP's technology program provides several opportunities each year for training to keep staff abreast of new tools and techniques to better perform their jobs. FWP tends to be near the leading edge in several areas within the industry. Cross training occurs to allow the necessary support to exist during times of employee absence.

Status: Ongoing

Supporting Objective/Action

ITO 4-3 Develop retention strategies to address workforce-staffing challenges and minimize any dissatisfaction.

Accomplishments: FWP has allowed numerous options to help with retention of employees. Salary adjustments when necessary have been supported. Flex-time, Tele-work and numerous other creative methods offer options to help with job satisfaction and retention of employees. Individuals are allowed to volunteer for cross-program efforts to offer variation to a normal day to day effort that has potential to become less interesting.

Status: Ongoing

Goal Number 5

ITG 5 Develop and implement standardized practices and procedures.

Description: FWP ISD will develop and implement standardized information services practices and procedures by researching industry accepted “best practices”, and selecting and documenting those standards applicable to FWP information services.

Benefits:

- Consistent practices and procedures
- Clear decision-making
- Efficient and effective use of IT and other staff resources
- Accountability
- Improved government services
- Positive ROI
- Greater Customer Satisfaction
- Project Risk Mitigation

Which state strategic goal(s) and/or objective(s) does your goal address?

Development and adherence to standard practices and procedures will lead to organized, deliberate and cost effective IT resource development, and ultimately improved government services.

Supporting Objective/Action

ITO 5-1 Standardize applications processes and methodologies.

- Develop and implement efficient and effective application development request review processes
- Refine the existing FWP request process to ensure appropriate FWP management are notified and involved
- Utilize appropriate project management methodologies and practices based on:
 - Project criticality from an agency perspective
 - Experience levels of developers
 - Number of development resources required
 - Anticipated frequency of requirement changes

Accomplishments: A process for requesting technological services was defined and communicated to FWP employees. The process utilizes a programmatic chain of command to ensure that program decision makers are aware of everything program staff request, to ensure that program priorities are being addressed by limited technological resources. A governance body representing the new organizational structure was

created so that all programs have an equal voice as agency priorities are decided for technology resources. Although challenging, FWP management and oversight of assigned projects has been effective with quality delivery on schedules that have been acceptable to customers.

Status: Request and prioritization process – documented and completed. Utilization is ongoing as requests are submitted. Effective project management is ongoing as new projects are initiated and pursued.

Supporting Objective/Action

ITO 5-2 Create consistent standards and guidelines for the collection, development, and storage of FWP's data and metadata.

Accomplishments: Standards continue to be developed as large projects proceed. Much of the effort must rely on program staff who better understand each piece of data, where and how it is captured, and what the defaults and boundaries should be for all similar types of data to be collected.

Status: Ongoing as different data types become involved due to specific projects underway.

Supporting Objective/Action

ITO 5-3 Develop and implement policies and standards for management of FWP's website related to content, partnerships and links.

Accomplishments: Policies and standards for FWP's Web site continue to be identified. A "web team" was created to allow cross program views to be considered and pertinent expertise to be available for decisions related to the site, and its content and offered services.

Status: Ongoing

Supporting Objective/Action

ITO 5-4 Develop agency software and hardware standards. Identify centralized procurement processes for IT products and services. Develop, document, and distribute standards and centralized procurement process for all IT products and services.

Accomplishments: Standard software and hardware platforms have been identified. Procurement processes involving technology related products or services are managed with Technology staff oversight to ensure that standards are consistently followed.

Status: Standards completed, oversight of procurement efforts is ongoing.

Supporting Objective/Action

ITO 5-5 Create, publish, and communicate guidelines that define when use of IT service contracts is appropriate for consideration by FWP programs.

Accomplishments: Guidelines have been identified and communicated. Technology service contracts are developed in conjunction with oversight by Technology staff to ensure that guidelines are consistently followed, and contract provisions keep FWP's best interest in mind.

Status: Guidelines have been completed, oversight of contracted efforts ongoing.

SECTION 2: IT INITIATIVES STATUS UPDATE

Complete this section by copy and pasting the IT Initiatives listed in section 7.1 of your agency's 2008 plan. After each initiative, insert the two additional questions for status and funding. Answer these two questions.

2.1 IT Initiatives (*Taken from 2008 plan and 2009 update*)

Initiative 1 - Title: Increased Full Time Staff

Description: FWP had been using modified FTE, borrowed FTE and contracted services as staff augmentation tools to fill gaps and resource shortages. Uncertainty of position stability made recruitment and retention difficult for modified positions. Contracted services are very expensive and less than effective use of funds for day-to-day ongoing operational responsibilities. Agency security needs, and ultimately the anticipated enterprise security policy, requires a full time agency security position with responsibilities that appear to go well beyond one full time employee's capabilities. This initiative redirects operations funds utilized for expensive contracted services to internal full time staff so that funds can be more effectively used. It is anticipated that the initiative will simply ask for "positions" but not funding, thereby resulting in a "cost neutral" proposal.

EPP Number (if applicable): DP101 & DP102

Status: Substantially completed - DP101 and DP102 were approved by the 2009 Legislature, but in OTO status.

These decision packages redirected operations funding to personal services funding. Modified positions were converted to permanent at the beginning of the biennium. Because of increased vacancy savings requirements, new positions had to be left open much longer than desired, however all positions were ultimately filled. Because they were categorized OTO, the 2011 Legislature must be approached to re-request this decision package. If disallowed, the result will be existing employees being terminated.

Funding: Funded

Initiative 2 - Title: CORE FWP Infrastructure Replacement and Enhancement

Description: The project would allow for state policy driven replacement of components within FWP's Storage Area Network (SAN), and File Servers used around the state in Regional and Area Offices. Since initial deployment, demands and expectations for all equipment has grown substantially, requiring more robust implementations. The Helena based SAN provides mirrored and redundant operations for FWP's website, internal databases, and file/print environment and has components which are aging and should be replaced in accordance with state policy. Initially in field offices, a small server could perform necessary file/print and backup processes. The industry has now evolved to equipment managing much heavier work activities, including functioning as engines for virus and other software patch management. In several areas of the state, FWP strategically plans to have sites able to function as recovery sites for Helena based

computing to ensure continuity of operations in the event of disaster. This initiative is dependent upon funding with a request expected for a base adjustment.

EPP Number (if applicable): DP103

Status: Completed – DP103 was approved by the 2009 Legislature.

Funding: Funded

Initiative 3 - Title: Video Conferencing

Description: Due to the large geographic nature of the state and FWP's presence throughout, the department is considering implementing video conferencing at all Regional Headquarters facilities as well as the Department Headquarters in Helena. Implementation of a video conferencing system would help reduce overall travel costs and allow for enhanced public comment. This initiative is dependent upon funding.

EPP Number (if applicable): N/A

Status: Substantially completed - Video gear has been purchased and installed at the FWP headquarters and regional offices. Training and coordination continues to help participants understand how to make the most effective use of the technology.

Funding: Funded through re-direction.

Initiative 4 - Title: Field Communications Infrastructure

Description: FWP has a large number of employees that work out of small offices or their homes. In order to make these employees more effective, reliable, robust data links are necessary to these small offices. As more and more agency data become centralized and the demand for relevant results in shorter time frames increases, high-speed capabilities for FWP field staff are essential to maintain productivity. This initiative is dependent upon internal funding possibilities.

EPP Number (if applicable): N/A

Status: Ongoing, Programs decide for specific employees whether high-speed access is a priority or not for a given service or application. Program funds are then re-directed where appropriate to provide such access.

Funding: Funded through re-direction as determined by program management.

Initiative 5 - Title: Enhanced Law Enforcement Technology

Description: FWP Enforcement would like to pursue procurement and installation of enhanced enforcement technology within their patrol vehicles in a cooperative venture with other law enforcement agencies across Montana. This initiative would place a Tough Book laptop with docking station and communications technology in each field warden's vehicle. These devices would allow wardens to immediately identify all other enforcement actions and issues for any individual they were currently in contact with in the field. Concerns addressed would include officer safety and whether the individual should be detained for other enforcement related issues (wants/warrants, recent citations or warnings, criminal history and stolen vehicle information, etc) Future integration with other FWP enforcement

systems would allow comprehensive information to be at the warden's fingertips in the remote locations of the state that they must patrol. This initiative is dependent upon funding, with grants and homeland security funds being looked at as possible sources.

EPP Number (if applicable): N/A

Status: Ongoing, Pilot underway utilizing 2 warden vehicles. Anticipating a successful pilot, FWP envisions 20% of warden vehicles equipped during FY2011.

Funding: Pilot funded through re-direction. Entire project not funded, continuing examination of alternatives to provide adequate funding.

Initiative 6 - Title: Automated Licensing POS Terminal Replacement

Description: FWP's client base of POS devices for the delivery of recreational licenses to its customers is aging rapidly. By the end of the current biennium, the newest of these machines will be nearing six years old. In addition, these devices operate in harsh environments and have limited hardware and software support. In an effort to modernize this critical business area, new devices with full manufacturer support, enhanced security and support capabilities, and a more robust design will be procured and deployed. This initiative is dependent upon funding and creative measures will be necessary including possibilities of internal redirection.

EPP Number (if applicable): N/A

Status: Ongoing. Several devices were tested with new "thin client" type equipment proving to be robust enough to perform the job. The smaller chassis and footprint is well received by private businesses that continually look for "counter space" and deployment is anticipated to occur over the course of several years.

Funding: Funded through redirection.

Initiative 7 - Title: GIS Infrastructure Enhancements

Description: The project would upgrade FWP's internal GIS infrastructure to allow for more efficient utilization of these resources. Centralization of core GIS layers and the implementation of versioned Geodatabases on an enterprise database platform will allow FWP's GIS technicians and consumers to more effectively utilize these resources. This initiative is dependent upon funding and creative measures will be necessary including possibilities of internal redirection.

EPP Number (if applicable): N/A

Status: Ongoing. FWP recently completed implementation of a "test" ARCServer environment, and plan to stand up a production environment within the upcoming months.

Funding: Funded through redirection

Initiative 8 - Title: SummitNet Expansion for FWP Offices

Description: During the FY10-11 bi-ennium, FWP ISD will be bringing three (3) existing FWP facilities onto SummitNet. In order to accomplish this objective, FWP will incur new equipment and wiring costs.

EPP Number (if applicable): N/A

Status: Completed

Funding: Connections funded through FMM.

SECTION 3: ADDITIONAL INFORMATION - OPTIONAL

Other types of information that your agency may wish to report as accomplishments or challenges related to achieving the Goals, Objectives, and Initiatives outlined in your 2008 IT plan.